

REMARKS

Claims 1–14 are pending in the present application.

Claim 13 was amended solely to correct a typographical error therein.

Reconsideration of the claims is respectfully requested.

35 U.S.C. § 103 (Obviousness)

Claims 1–14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,587,44 to *Lenzo et al.* This rejection is respectfully traversed.

In *ex parte* examination of patent applications, the Patent Office bears the burden of establishing a *prima facie* case of obviousness. MPEP § 2142, p. 2100-128 (8th ed. rev. 2 May 2004). Absent such a *prima facie* case, the applicant is under no obligation to produce evidence of nonobviousness. *Id.*

To establish a *prima facie* case of obviousness, three basic criteria must be met: First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *Id.*

Independent claims 1, 5, 10 and 13 each recite an uplink frequency used in a first sector

during a first period and a downlink frequency used in the first sector during a second period, while the uplink frequency is used in a second, adjacent sector during the second period and the downlink frequency is used in the second sector during the first period (or vice versa). Such a combination of features is not found in the cited reference.

Lenzo et al discloses a so-called frequency-time division duplex (FTDD) scheme in which offset, complimentary time-shifting of dedicated uplink and downlink frequencies by co-located base stations, but for the purposes of providing “complete time and spectral efficiency . . . for a particular coverage area.” *Lenzo et al*, column 6, lines 29–36. *Lenzo et al* does not teach or suggest use of the disclosed offset, complimentary FTDD transmissions for adjacent sectors rather than a single area, thus reducing co-channel interference by separating transmissions by time, frequency and space as achieved in the claimed invention.

The Office Action asserts that modification of the offset, complimentary FTDD transmissions from a single coverage area to include offset (or alternating) transmission in adjacent sectors would be motivated by the desire “to obtain the same benefits.” However, to the extent that use of offset, complimentary FTDD transmissions by co-located transmitters for a single coverage area provides any benefit over simple FDD transmissions, such benefits are not necessarily achieved when such a scheme is applied to adjacent sectors. *Lenzo et al* states that offset, complimentary FTDD transmissions are used in a single cover area to provide complete time and spectral efficiency for the coverage area--that is, full utilization of available bandwidth. However, in applying offset,

complimentary use of dedicated uplink and downlink frequencies in different adjacent sectors rather than a single coverage area, full bandwidth utilization is not achieved for the combined sectors. Instead, only half-bandwidth utilization is achieved, both overall and in each sector, but cross-sector interference is reduced. The proposed modification to *Lenzo et al* to achieve the claimed invention thus fails to provide the benefits described by *Lenzo et al* in the system as modified.

Therefore, the rejection of claims 1–14 under 35 U.S.C. § 103 has been overcome.

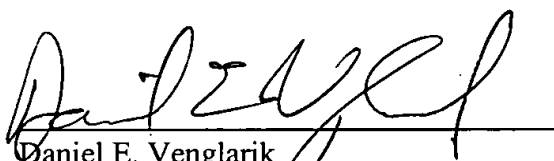
If any issues arise, or if the Examiner has any suggestions for expediting allowance of this Application, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at *dvenglarik@davismunck.com*.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Deposit Account No. 50-0208.

Respectfully submitted,

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